REMARKS

Claims 7, 17-19, 28 and 29 are amended herein. Upon entry of this amendment, claims 1-30 will be pending. Applicant acknowledges with gratitude the allowance of claim 30.

The courteous telephone interview granted by Examiner Henderson on June 18, 2003 with the undersigned attorney is appreciated. This amendment is responsive to the April 24, 2003 Office action and the issues raised and discussed in the June 18 interview.

I. Response to Rejections under §112

In view of the following amendments and/or reasons, claims 7 and 17 are believed to satisfy 35 U.S.C. §112.

(a) Claim 7

Claim 7 has been amended to eliminate the term "upstanding". The language of the claim has been clarified by stating the "engagement portion extends away from the base member". This feature is clearly shown in the drawings (e.g., see Fig. 3A).

(b) Claim 17

Claim 17 has been amended to change the term "engagement member" (for which the Examiner correctly noted lacked antecedent basis) to "engagement portion". This editorial change has no effect on the scope of the claim.

II. Response to Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-29 as being unpatentable over Davies (U.S. Patent No. 5,158,387) in view of Schuessler (U.S. Patent No. 5,160,209).

The present invention relates a ring binder having an improved securing means (fastener) that secures the ring binder to a notebook cover. The ring binder industry is a high volume industry where one seemingly small manufacturing or design improvement resulting in a relatively small cost savings per binder is magnified by the high volume (i.e., millions) of ring binders manufactured and sold each year. The securing fastener of the present invention is constructed with an integral design that reduces material costs and simplifies handling thus reducing manufacturing costs of the ring binder. Moreover, the integral design enhances strength which is important for inside mount fasteners which are driven violently against the notebook to penetrate and secure the fastener (and hence the ring binder) to the notebook. Also, the securing

fastener of the present invention provides a stronger connection force than prior art inside fasteners mount, providing a more reliable connection of the ring binder to the notebook.

(a) Claims 1-17

Claim 1 is directed to a ring binder having a prong bushing (securing means) having a construction which greatly facilitates the manufacture of the ring binder. The connection of the engagement portion (e.g., post) directly to the rigid upper structure eliminates connection eyelets. Moreover, the arrangement of the securing elements allows the securing means and upper structure to be assembled prior to the attachment of the ring binder to the base member (e.g., a notebook cover).

More particularly, claim 1 is directed to a ring binder adapted to be secured to a base member, the ring binder comprising:

- a substantially rigid integral upper structure;
- a pivotable lower structure supported by said upper structure;
- a plurality of ring members mounted to said lower structure; and
- at least one integral securing means for securing said ring binder to said base member, said at least one securing means including,

an engagement portion in direct engagement with the upper structure for attaching said securing fastener to said upper structure; and

a plurality of securing elements for securing said ring binder to the base member, at least 75% of said elements extending away from a longitudinal axis of the engagement portion.

Claim 1 is nonobvious and patentable over the prior art of record, including in particular Davies and Schuessler, in that none of the references show or suggest a ring binder having at least one integral securing means with an engagement portion in direct engagement with the upper structure.

Davies discloses a ring binder 10 secured to a lamination 15 of spine 14 of the binder cover by a threaded fastener 22 that is threadably received in a T-nut 29. As best seen in Fig. 3, the securing means of Davies comprises two parts: the threaded fastener 22 in engagement with the ring binder element 21 and the T-nut 29 that is securely scated in the outer side of cover lamination 15 and receives the threaded fastener. The T-nut 29 has a threaded central post 30 and sharpened prongs 32 for attachment to the cover lamination 15. The sharpened prongs 32 of the T-nut 29 are constructed to securely scat the T-nut in the inner

lamination 15 and prevent the T-nut from rotating when receiving the threaded fastener 22 (see col. 3, ll. 30-67). The prongs 32 do not provide the attachment force securing the ring binder to the cover. Rather the attachment force is provided by the clamping force of the threaded fastener 22 threadably connected with the T-nut 29.

Schuessler discloses a ring binder 10 having fasteners 16 and 18 for fastening the ring hardware 14 to a cover 12 of the binder. The fasteners 16 and 18 have an anchor plate 54 and post 56. The anchor plate 54 includes a series of attachment prongs 62 for securing the fastener to the binder. As shown in Fig. 6, the post 56 of each fastener 16, 18 is received in a corresponding sleeve or eyelet 52 in the ring support plate 44. The post 56 is not in direct engagement with the ring support plate 44 because the standoff sleeve 52 intervenes between the post and the support plate.

Claim 1 is written in means plus function format in that the claims requires "at least one integral securing means for securing said ring binder to said base member".

Accordingly, the Patent Office must follow 35 U.S.C. § 112, paragraph 6, when interpreting means plus function claim language and give the claims their broadest reasonable interpretation in light of and consistent with the written description of the invention in the application. MPEP § 2181 and In Re Donaldson 29 USPQ 1845, 1850 (Fed. Cir. 1994). In interpreting a means plus function claim, the Patent Office must consult the specification and drawings of the patent application to determine the structure, material or acts corresponding to the function recited in the claim. Id. In this case the "at least one integral securing means" of claim 1 is defined in the written description and drawings of the application as being a rivet 30 comprising a cylindrical body 32, head 34 which engages the ring binder, and a substantially flat plate 36 with downwardly depending claws 38 (See Figs. 3A, 3B and 4). The cylindrical body 32, head 34, flat plate 36 and claws 38 are all integrally formed from a single piece of metal, so as to enhance the strength of the rivet (see col. 3, 11. 2-4).

There is no suggestion for combining Davies and Schuessler to produce a fastener which is integral and which is connected to the upper structure of the ring binder by <u>direct engagement</u> of the integral fastener with the upper structure. Both Davies and Schuessler require a two-piece connection. Davies requires a threaded fastener or bolt and a T-nut which must be threaded together to connect the ring binder to a notebook cover. Similarly, Schuessler requires a post and an engagement cyclet which must be placed between the post and the upper structure and bent over to secure the post (and hence the fastener) to the upper structure. Thus, it would be an error to say that Davies and Schuessler could be combined to produce the claimed invention.

The suggestion of Schuessler is that if a two-piece fastener is made integral (from a single piece of metal) then it is necessary to provide a second, non-integral piece (the eyelet) to secure the fastener to the upper structure. To use Schuessler to find a teaching of integral construction while ignoring the other teaching that a second non-integral piece (eyelet 52) is needed to make securing engagement with the upper structure is improper. Accordingly, claim 1 is not obvious in view of Schuessler and Davies.

A securing fastener as defined by claim 1 that is integral and is constructed for direct connection to the upper structure of the ring binder has many benefits and advantages over prior art fasteners, including the fasteners shown by Davies and Schuessler. The integral securing fastener of the present invention has sufficient strength to allow the fastener to be riveted to the upper structure prior to attaching the assembly to the inside surface of the ring binder cover. Ring binders secured by the fastener of Davies or Schuessler must be attached via an additional part which requires additional manufacturing steps, thus raising the cost of the binder. Also, the integral fastener of the present invention is stronger and more reliable and minimizes canting during assembly and after extended use of the ring binder. In particular, the fastener of Davies with a two-piece threaded fastener design, would be more likely to bend during assembly. The threaded connecting holding the binder to the cover could loosen over time. Furthermore, the integral fastener of the present invention provides a cost savings in material and manufacturing costs of each ring binder which is magnified by the high volume of ring binders that are produced each year.

Moreover, claim 1 requires that at least 75% of the securing elements of the securing means extend away from a longitudinal axis of the engagement portion. As stated in the Office action, Davies (or any other reference of record) does not disclose any such orientation of the securing elements. The Examiner states that this limitation in the claims would be obvious to one of ordinary skill in the art without citing a prior art reference that suggests this feature.

The securing elements of the claimed invention, with at least 75% of the elements extending away from the longitudinal axis of the engagement portion, provide a stronger engagement force with the cover that is particularly useful in an inside mount ring binder in that the strength of connection is greatly augmented. The orientation of the securing elements of the claimed invention simplifies the ring binder production process by allowing the securing elements and upper structure to first be made and assembled at the same location and then sent to another location for mounting on the cover.

The above stated advantages are generally stated in the specification at column 1, lines 35-37. In the telephone conference of June 18, the Examiner set forth his position that this recitation is not sufficient to support the particular advantages of this feature set forth above. Rather, the Examiner stated that he could not consider the advantages of the invention over the prior art unless the claims were amended to include an explicit listing of the advantages. The Federal Circuit has consistently held that advantages of the invention do not properly belong in the claims and it is entirely proper in evaluating non-obviousness of a claim to take into account advantages directly flowing from the invention. *Preemption Device Inc. v. Minnesota Mining and Mfg. Co.* 221 USPQ 841 (Fed. Cir. 1984). In the present application, the fact remains that the structure of at least 75% of the securing elements extending away from the longitudinal axis of the engagement portion is disclosed in the application. The advantage of this feature directly flows from the structure explicitly shown and does not require recitation in the body of the claim.

Furthermore, if the limitation requiring at least 75% of the securing elements extending away from the longitudinal axis of the engagement portion was obvious, the feature would have been shown or suggested by the prior art. As conceded by the Examiner, this feature is not shown or suggested by any of the references of record. The Examiner relies on In re Japikse 86 USPQ 70 (CCPA 1950) for his position that it would have obvious to rearrange the securing elements of Davies or Schuessler to extend in any desirable direction. In Japikse, the court held that rearranging the position of a starting switch of a hydraulic press which read on the prior art would not have modified the operation of the prior art press. In this case, modifying Davies over Schuessler so that at least 75% of the securing elements extend away from the longitudinal axis of the engagement portion would modify the operation of the fastener by improving the securing force of the fastener. Furthermore, in Ex Parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1989), the Board held that the mere fact that it is possible to rearrange parts to arrive at a claimed invention is not enough to support a finding of obviousness and the prior art must provide the motivation to make the necessary changes without the benefit of the applicant's disclosure. Similarly, the Examiner in the present application has shown no motivation in the prior art that suggests the claimed feature and is relying on pure hindsight in view of the applicant's disclosure in stating that it is obvious to construct a securing fastener with at least 75% of the securing elements extending away from the longitudinal axis of the engagement portion. Accordingly, the obviousness rejection of claim 1 is improper as being based on an obvious rearrangement of parts of the prior art.

Alternatively, the Examiner relies on In Re Aller, 105 USPQ 233, 235 (CCPA 1955), for the proposition that it would have been obvious to construct a securing fastener with at least 75% of the securing elements extending away from the longitudinal axis of the engagement portion because discovering optimum or workable ranges involve only routine skill in the art. In Aller, the court held that when the general conditions of a claim to a known process are disclosed in the prior art the discovery of an optimum value of a variable in the process is normally obvious. Id. In this case, the general conditions of the claim (the benefits of the arrangement of the securing elements) are not shown in any of the references of record. Accordingly, the obvious rejection of claim 1 is improper as being based on optimum or workable range of the prior art.

(b) Claim 18

Amended claim 18 is similar to claim 1, except that it refers to a "securing fastener" rather than "securing means" and further requires that "at least one securing fastener is integral for enhanced strength". More particularly, claim 18 is directed to a ring binder adapted to be secured to a base member, the ring binder comprising:

a substantially rigid integral upper structure;

a pivotable lower structure supported by said upper structure;

a plurality of ring members mounted to said lower structure; and

at least one securing fastener for securing said ring binder to said base member, wherein said at least one securing fastener is integral for enhanced strength, said at least one securing fastener including,

an engagement portion in direct engagement with the upper structure for attaching said securing fastener to said upper structure; and

a plurality of securing elements for securing said ring binder to the base member, at least 75% of said elements extending away from a longitudinal axis of the engagement portion.

Claim 18 is submitted as nonobvious and patentable over the prior art of record, including in particular Davies and Schuessler, in that none of the references show or suggest a ring binder having at least one securing fastener that is integral for enhanced strength and has an engagement portion in direct engagement with the upper structure and a plurality of securing elements, 75% of which extend away from the longitudinal axis of the engagement portion.

Claim 18 differs from claim 1 in that it is not set forth in means plus function format and requires "at least one securing fastener". Therefore, claim 18 must be given the broadest reasonable interpretation based on the plain meaning of the terms set forth in the claim unless the terms are explicitly defined in specification. MPEP 2111.01; *In re Zeltz* 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Claim 18 requires at least one securing fastener that is integral for enhanced strength. Since the term "integral" is not explicitly set forth in the specification, the Patent Office must rely on the plain meaning of the term in interpreting the claim. According to Webster's Ninth New Collegiate Dictionary, integral means "formed as a unit with another part". Also, the Federal Circuit has been presented with claim interpretation issues relating to the term "integral" and have also followed this definition. Vanguard Products Corp. v. Parker Hannifan Corp. 57 USPQ2d 1087 (Fed. Cir. 2000) (defining "integral" as "formed as a unit with another part"); Advanced Cardiovascular Systems Inc. v. Scimed Life Systems Inc. 12 USPQ2d 1539 (Fed. Cir. 1989) (defining "integral" as "formed as a unit with another part").

Applicants submit that this means at the time the "integral" item is made, it is formed as a unit, not broken apart in ordinary use. Thus, even a car seat and headrest might be said to be integral, because they are made as a unit and forever function as a unit. However, the threaded fastener 22 and T-nut 29 of Davies are initially made as two pieces which are separated in ordinary use to attach the ring binder to the notebook cover. Accordingly, the threaded fastener and T-nut are not an integral fastener as required by claim 18.

Furthermore, Applicant submits that it would not be obvious to make the securing fastener of Davies integral in view of Schuessler or as non-obvious matter of design choice. Both Davies (nut and bolt) and Schuessler (post and engagement eyelet) teach a non-integral securing fastener and therefore it would be an error to state that Davies and Schuessler could be combined to produce the claimed invention. Furthermore, making the securing fastener of Davies or Schuessler integral would not be an obvious matter of design choice because the inventor has recognized a need in the art of ring binders to simplify construction and reduce material and assembly costs and has shown insight that was contrary to the understanding and expectations of the art in providing an integral securing fastener that meets this need. (See MPEP §2144.04 and Schenk V. Norton 218 USPQ 698 (Fed. Cir. 1983) holding that an integral piece was not an obvious design choice where there was a specific need in the art to dampen vibration resonance).

Moreover, claim 18 requires that at least 75% of the securing elements of the securing means extend away from a longitudinal axis of the engagement portion. As stated in the Office action, Davies (nor any other reference of record) discloses any such orientation of the securing elements. The Examiner states that this limitation in the claims would be obvious to one of ordinary skill in the art without citing a prior art reference that suggests this feature.

As stated above for claim 1, claim 18 is nonobvious and patentable for the additional reason that a securing fastener having at least 75% of the securing elements extending away from a longitudinal axis of the engagement portion is not shown or suggested in the prior art. As set forth above, the benefit of this feature include a stronger engagement force allowing a simplified assembly process. It would be error to view this feature as an obvious choice of design in view of the teachings of the prior art or to characterize this feature as an obvious result from rearranging parts of the prior art fasteners because no motivation for the required limitation is shown in the prior art. Also, this feature cannot be viewed as an optimum value of a variable of a known process because the benefits of having any percentage (let alone at least 75%) of the securing elements extending away from a longitudinal axis of the engagement portion of the securing fastener is not shown in the prior art.

For the foregoing reasons, claim 18 is submitted to be non-obvious and patentable over the references of record.

(c) Claims 19-29

Independent claims 19, 28 and 29 are similar to claim 18 and are patentable for the same reasons as set forth above for claim 18. Claims 20-27, depending directly or indirectly from claim 19, are patentable for the same reasons as claim 19.

CONCLUSION

In view of the foregoing, reconsideration and allowance of claims 1-29 is requested.

Applicant does not believe that any fee is required by the timely submission of this response to the Office action mailed April 24, 2003. The Commissioner is authorized to charge any fee deficiency or credit any overpayment to Deposit Account No. 19-1345 in the name of Senniger, Powers, Leavitt & Roedel.

Respectfully submitted,

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